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EXAMINER

RALIS, STEPHEN J

ART UNIT	PAPER NUMBER
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3742

MAIL DATE	DELIVERY MODE
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10/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/669,155	Applicant(s) COHEN ET AL.	
	Examiner STEPHEN J. RALIS	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-20, 82 and 83 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-20, 82 and 83 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 and 30 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Applicant is respectfully requested to provide a location within the disclosure to support any further amendments to the claims due to when filing an amendment an applicant should show support in the original disclosure for new or amended claims. See MPEP § 714.02 and § 2163.06 ("Applicant should specifically point out the support for any amendments made to the disclosure.").

Response to Arguments

3. Applicant's arguments with respect to claims 1-10, 12-20, 82 and 83 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
7. Claims 1-4, 6-9 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao et al. (Japanese Publication No. JP 09164300A) in view of Kuwamoto et al. (Japanese Publication No. JP 6122890 A), Har et al. (U.S. Publication No. 2001/0032403) and Hashimoto (U.S. Patent No. JP 08262052 A).

Nakao et al. disclose a controller (printed circuit board 28; and Drawing 1) for use with a fabric grooming device (cordless iron 2) comprising: an input selectors (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11), a plurality of output indicators (set temperature; temperature level; buzzer 14), and a digital display panel (liquid crystal display [LCD] 13) for displaying scrolled text and segmented text; wherein the input selector (setup key 29/ switch 11 combination), the plurality of output indicators (set temperature; temperature level; buzzer 14) and the digital display panel (liquid crystal display [LCD] 13) are incorporated on an interactive user interface (see

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Figures 1, 2), wherein the interactive interface is operatively connected to a microprocessor (10), wherein the interactive interface is integrated onto the a handle of the fabric grooming device (see Drawing 2); and the input selector being a temperature setting selector (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11).

With respect to the limitation of a digital display panel for displaying scrolled text and segmented text, Nakao et al. disclose the liquid crystal display (13) for displaying set temperature and the temperature level which would be inherently segmented text/numbers. In addition, it has been held that the recitation that an element is “for” performing a function is not a positive limitation but only requires the claimed structural limitations and the ability to so perform as such. Nakao et al. clearly disclose a liquid crystal display (13) for displaying set temperature and the temperature level and would have the ability to display both scrolled and segmented text/numbers. Therefore since Nakao et al. disclose the structural limitations of a controller (printed circuit board 28; and Drawing 1) and a digital display panel (liquid crystal display [LCD] 13) for displaying segmented text/numbers due to LCD displays are very interactive and programmable, Nakao et al. fully meets “a digital display panel for displaying scrolled text and segmented text” given its broadest reasonable interpretation.

With respect to the limitations of claims 8 and 9 and at least one of said one or more output indicators being a display panel, specifically an LCD panel, Nakao et al. explicitly disclose the indicating means being a liquid crystal display (13) for displaying set temperature and the temperature level mounted on the iron (English MAT; page 1, Solution) and a liquid crystal display for displaying set temperature and the temperature

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level inherently would have a display panel for each output or the LCD panel would not function providing both the set temperature and the temperature level, accordingly.

With respect to the limitations of claim 12 and one or more output indicators being a visual indicator, Nakao et al. explicitly disclose an indicating liquid crystal display (13) for displaying set temperature and the temperature level mounted on the iron (English MAT; page 1, Solution).

With respect to the limitations of claims 13, 14 and 17 and one or more output indicators being an audible indicator, tactile indicator and the microprocessor being operatively connected to a vibrator, Nakao et al. explicitly disclose an output indicator (buzzer 14) being connected to the microprocessor (10). The buzzer clearly makes an audible indication of an event and the examiner notes that a buzzer would inherently create a vibration sensitive to touch or tactile indication of the buzzer when activated. Therefore, Nakao et al. fully meets “wherein said one or more output indicators are a tactile indicator” and “wherein said microprocessor is operatively connected to a vibrator” given its broadest reasonable interpretation.

With respect to the limitations of claim 15 and the microprocessor being operatively connected to a sound generator, one or more sensors, and/or a heater, Nakao et al. explicitly disclose a schematic circuit (see Drawing 1) comprising microprocessor (10) operatively connected to a temperature sensor/thermistor (15), buzzer (14) and heater (7).

With respect to the limitations of claims 16 and microprocessor is also operatively connected to a timer, Nakao et al. explicitly disclose the microprocessor (10) comprising

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detection means (pause detection means 16) that will start an internal timer... (English MAT; page 5, paragraph 17).

Nakao et al. disclose all of the limitations of the claimed invention, as previously set forth, except for a plurality of input selectors a fabric setting selector; and one or more input selectors have an image or symbol associated therewith for identifying the function and/or operation corresponding thereto.

However, a controller for a user interface having one or more input selectors having a temperature/fabric setting selector image or symbol for identifying the function and/or operation of a pressing iron is known in the art. Kuwamoto et al., for example, teach a display panel (flat display-operation part 14) comprising multiple input selection buttons (UP switch 17, DOWN switch 18), each button corresponding to a particular temperature of the iron as well as fabric types suitable for each temperature and conventional markings used on conventional iron temperatures controls (page 5, line 9 –page , line 13). The advantage of such a configuration provides a user a mechanism to both “raise” and “lower” the set temperature marks that coincide with fabric types/temperatures, thereby increasing the operational safety and allowing the user to readily and easily set a temperature according to fabric types.

In addition, Nakao et al. disclose all of the limitations of the claimed invention, as previously set forth, except for a steam selector that is operatively connected to a steam generator to provide selective manipulation of steam generation levels.

However, a steam selector that is operatively connected to a steam generator to provide selective manipulation of steam generation levels is known in the art. Har et al.,

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for example, teach a steam iron (Title) comprising a steam selector (selector switch 26) being operatively connected to a steam generator (6) via a control means (16) to provide selective manipulation of steam generation levels (page 2, paragraph 17 – page 3, paragraph 44; see Figures 1-3). Har et al. further teach the advantage of such a configuration provides the ability for the iron to function as a dry iron or steam iron as well as when the iron is selected to function as a steam iron to perform a suitable steam pattern per fabric type (LUT), thereby providing the proper conditioning, relaxation and fixation of the fibers during ironing.

Similarly, Nakao et al. disclose all of the limitations of the claimed invention, as previously set forth, except for an impact sensor that automatically deactivates the fabric grooming device in response to sensory input ascertained as a consequence of the fabric grooming device being dropped.

However, an impact sensor that automatically deactivates a radiant heating device in response to sensory input ascertained as a consequence of the radiant heating device being dropped is known in the art. Hashimoto, for example, teaches an electric radiant heating device comprising an impact detector (shock sensing device 20) that automatically deactivates the electric radiant heating device in response to sensory input ascertained as a consequence of the electric radiant heating device being dropped (Title; English Translation; Abstract). Hashimoto further teaches the advantage of such a configuration provides a means to prevent an accident beforehand, thereby increasing the operational safety of the device (paragraphs 13-18; MAT).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the input selector of Nakao et al. with a plurality of input selectors and an image/symbol associated to the input selector in order to provide a user a mechanism to both “raise” and “lower” the set temperature marks that coincide with fabric types/temperatures, thereby increasing the operational safety and allowing the user to readily and easily set a temperature according to fabric types. In addition, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Nakao et al. in view of Kuwamoto et al. with the steam selector, steam generator and control thereof of Har et al. in order to provide the means for the iron to function as a dry iron or steam iron as well as when the iron is selected to function as a steam iron to perform a suitable steam pattern per fabric type (LUT), thereby providing the proper conditioning, relaxation and fixation of the fibers during ironing. Similarly, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Nakao et al. with the impact sensor of Hashimoto in order to provide a means to prevent an accident beforehand, thereby increasing the operational safety of the device.

With respect to the limitations of claim 4 and at least one or more input selectors being an LCD panel, Nakao et al. disclose the input selector (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11) being at the lower portion of the liquid crystal display (13) panel (see Drawing 1), thereby being part of the LCD panel or an LCD panel. In view of Kuwamoto et al., providing multiple input selectors with images associated therewith would only increase the length of the user interface and therefore

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would still be at the lower portion of the liquid crystal display (13) panel (see Figure 1, 2), thereby being part of the LCD panel or an LCD panel. Therefore, the Nakao et al. and the Nakao in view of Kuwamoto et al structures fully meet “at least one or more input selectors being an LCD panel” given its broadest reasonable interpretation.

8. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao et al. (Japanese Publication No. JP 09164300A) in view of Kuwamoto et al. (Japanese Publication No. JP 6122890 A), Har et al. (U.S. Publication No. 2001/0032403) and Hashimoto (Japanese Publication No. JP 08262052 A) as applied to claims 1-4, 6-9 and 12-17 above, and further in view of Upadhye et al. (U.S. Publication No. 2003/0074903).

Nakao et al. in view of Kuwamoto et al., Har et al. and Hashimoto discloses all of the claimed limitations, as previously set forth, except for the input selectors and output indicators being an LED panel.

However, Upadhye et al. teach that input user interface touchscreen LCD panel or LED panel for a portable heating device being equivalent structures known in the art. Upadhye et al. teach an input device (exemplary input device 76 shown as a keypad may also include a touchscreen) comprising input selectors (touchscreen) being displayed in an LCD or LED display (display indicator 78) depending on the temperature selection (page 3, paragraph 40; see Figure 9). Furthermore, the touchscreen input device (76) being on a LCD or LED display panel structure fully meets an “input selector being an LCD or LED panel” given its broadest reasonable interpretation. Therefore,

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because these two input selector display panel devices were art recognized equivalents at the time of the invention was made, one of ordinary skill in the art would have found it obvious to utilize an input touchscreen selector on an LCD or LED panel, depending on system requirements, to provide a lower power consumption device and a higher resolution in the device allowing for a smaller but comfortable display, thereby providing a quality product interaction experience.

9. Claims 18-20, 82 and 83 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao et al. (Japanese Publication No. JP 09164300A) in view of Kuwamoto et al. (Japanese Publication No. JP 61228900 A), Har et al. (U.S. Publication No. 2001/0032403) and Hashimoto (Japanese Publication No. JP 08262052 A) as applied to claims 1-4, 6-9 and 12-17 above, and further in view of Barnes et al. (U.S. Patent No. 6,255,630).

Nakao et al. in view of Kuwamoto et al., Har et al. and Hashimoto discloses all of the claimed limitations, as previously set forth, except for the digital interface of the controller having a scrolling LCD display suitable for displaying scrolling text.

However, controllers for heating devices comprising a scrolling text LCD display is known in the art, Barnes et al., for example, teach a controller comprising a control panel (28) that has a central LCD display (column 2, lines 47-54). Barnes et al. teach a display common zone (125) that is utilized to display numerous messages in the form of an array of words or phrases and phrases (column 4, lines 32-36; column 4, line 56 – column 5, line 5; column 6, lines 42-46; column 7, lines 6-11, 27-36; column 8, claim 8;

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column 9, claim 13; column 10, claim 24). Barnes et al. teach that advantage of such a configuration provides information based on ease of use of and convenience, thereby decreasing the operating complexity of the device. It would have been obvious to one of ordinary skill in the art at the time of the invention was to modify Nakao et al. in view of Kuwamoto et al. with a scrolling text LCD display in order to provide information based on ease of use of and convenience, thereby decreasing the operating complexity of the device.

With respect to the limitations of claim 19 and the interface being operatively connected with a microprocessor and one or more sensors, a sound generator, and a heater, Nakao et al. explicitly discloses a digital interface having a segmented LCD display (i.e. numeral characters of temperature; see Drawing 2). In addition, Nakao et al. disclose an input selector (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11). The examiner notes that a digital interface is the electronic handshaking that occurs between various components within a device (i.e. microcontroller and components). Nakao et al. further explicitly disclose a schematic circuit (see Drawing 1) comprising microprocessor (10) operatively connected to a temperature sensor/thermistor (15), buzzer (14) and heater (7). Therefore since the interface of Nakao et al. is digital and comprises a microprocessor (10), sensor/thermistor (15), buzzer (14) and heater (7), Nakao et al. in view of Kuwamoto et al. and in further view Barnes et al. fully meets “wherein said interface is operatively connected with a microprocessor and one or more sensors, a sound generator, and a heater” given its broadest reasonable interpretation.

With respect to the limitations of claims 20, 82 and 83 and the digital interface/input selectors being a touch sensitive panel, Nakao et al. explicitly discloses a digital interface having a segmented LCD display (i.e. numeral characters of temperature; see Drawing 2). Nakao et al. further disclose an input selector (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11). The examiner notes that a digital interface is the electronic handshaking that occurs between various components within a device (i.e. microcontroller and components). Nakao et al. clearly disclose a touch sensitive panel/user interface having inputs being controlled by microprocessor (10), which displays the input selections in a digital display (liquid crystal display 13). The interface is inherently digital and the input selector (setup key 29/ switch 11 combination) is further a touch-sensitive panel of the device would not operate when the setup key (29) is touched. Therefore, the Nakao et al. in view of Barnes et al. structure fully meets “and the digital interface selectors being a touch sensitive panel” and “at least one of said one or more input selectors is a touch-sensitive panel” given its broadest reasonable interpretation.

Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,453,587 to Alipour is a teaching of a clothes iron that may incorporate the use of a force sensor to activate/deactivate the iron.

Japanese Publication No. JP 2001153373 A to Fukada is a teaching of a heating device having a fall power supply switch to deactivate an electric heating device.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN J. RALIS whose telephone number is (571)272-6227. The examiner can normally be reached on Monday - Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SJR
October 21, 2008